

ABSTRACT

**THERMOFORMING MULTILAYER FILM FOR PROTECTING SUBSTRATES,
AND OBJECTS OBTAINED**

Company known as : ATOFINA

4 & 8 Cours Michelet

La Défense 10

92800 PUTEAUX - Hauts-de-Seine

Authorized agent : Henry NÉEL

Inventors :

David SILAGY

Franck BERTOUX

Philippe BUSSI

Anthony BONNET

The present invention relates to a thermoforming multilayer film comprising, successively:

at least one layer chosen from layers (A1) and (A2) and such that, if (A2) is present, then (A2) is placed next to the optional layer (B1), optionally a layer (B1), a layer (B2), a layer (B3) and optionally a layer (B4), in which the layer (A1) comprises a fluoropolymer (A11) or a polymer (A12) consisting essentially of alkyl (meth)acrylate units or a blend of the two, the layer (A2) consists of ink, the layer (B1) comprises a fluoropolymer (B11) or a polymer (B12) consisting essentially of alkyl (meth)acrylate units or a blend of the two, the layer (B2) is based on polyamide with amine end groups, the layer (B3) consists of a polyolefin functionalized with an unsaturated carboxylic anhydride, and the layer (B4) is made of polyolefin.

According to one particular form of the invention, the layer (A1) is replaced with two layers (A11) and (A12) :

- the layer (A11) comprises a fluoropolymer (A111) or a polymer (A112) consisting essentially of alkyl (meth)acrylate units or a blend of the two,
- the layer (A12) comprises, by weight, 0 to 50% of a fluoropolymer (A111) and 50 to 100% of a polymer (A112) consisting essentially of alkyl (meth)acrylate units.

This film is obtained by co-extrusion of the various layers; they may all be co-extruded, at least two of them may be co-extruded and the other layers may then be layered either separately or by co-extrusion, or any combination of these possibilities. Advantageously, a film comprising the layers (B) and a film comprising the layers (A) are manufactured separately and are hot-assembled.